

CLAIMS

1. A stackable refuse collection container comprising:

a body having a bottom and an open top, the body constructed to be nestingly stacked with at least one similar body through the open top;

a cover formed to engage the body and close the top;

an engagement mechanism coupled to the body and the cover, the engagement mechanisms moveable between an engaged position securing the cover onto the body to allow compaction of refuse therein, and a disengaged position permitting removal of the cover from the open top; and

a loading door formed in an end for receiving refuse from a compactor mechanism.

2. A stackable refuse collection container as claimed in claim 1 wherein the body defines a volume larger at the top than at the bottom.

3. A stackable refuse collection container as claimed in claim 2 wherein the body includes sides slanted inwardly from

the top to the bottom to define the volume larger at the top than at the bottom.

4. A stackable refuse collection container as claimed in claim 1 further including lower rails extending along an outer surface of the bottom.

5. A stackable refuse collection container as claimed in claim 4 wherein the lower rails include apertures extending therethrough for receiving a lifting mechanism.

6. A stackable refuse collection container as claimed in claim 4 further including rollers carried by the lower rails.

7. A stackable refuse collection container as claimed in claim 3 further including an upper rail extending along an upper edge of each of the sides.

8. A stackable refuse collection container as claimed in claim 7 wherein the upper rails include apertures extending therethrough for receiving a lifting mechanism.

9. A stackable refuse collection container as claimed in claim 7 further including rollers carried by the upper rails and extending downwardly from a lower portion thereof.

10. A stackable refuse collection container as claimed in claim 1 further including a discharge door formed in an opposing end of the body.

11. A stackable refuse collection container as claimed in claim 1 wherein the cover further includes a lifting structure.

12. A stackable refuse collection container as claimed in claim 11 wherein the lifting structure includes apertures formed through a frame thereof.

13. A stackable refuse collection container as claimed in claim 1 wherein the engagement mechanisms includes securing elements at opposing sides of the top.

14. A stackable refuse collection container as claimed in claim 13 wherein one of the securing elements is a hinge.

15. A stackable refuse collection container and refuse collection vehicle comprising:

a refuse collection vehicle including a chassis carrying a compaction mechanism; and

a stackable refuse collection container removably carried by the chassis adjacent the compaction mechanism, the container including:

a body having a bottom and an open top, the body constructed to be nestingly stacked with at least one similar body through the open top;

a cover formed to engage the body and close the top;

an engagement mechanism coupled to the body and the cover, the engagement mechanisms moveable between an engaged position securing the cover onto the body to allow compaction of refuse therein by the compaction mechanism, and a disengaged position permitting removal of the cover from the open top; and

a loading door formed in an end of the body adjacent the compaction mechanism for receiving refuse from the compaction mechanism.

16. A stackable refuse collection container and refuse collection vehicle as claimed in claim 15 wherein the compaction mechanism is mounted on the chassis one of rearward of the container and forward of the container.

17. A stackable refuse collection container and refuse collection vehicle as claimed in claim 15 wherein the body defines a volume larger at the top than at the bottom.

18. A stackable refuse collection container and refuse collection vehicle as claimed in claim 15 wherein the container includes a lifting structure for receiving a lifting mechanism to engage and disengage the container from the chassis.

19. A stackable refuse collection container and refuse collection vehicle as claimed in claim 15 further including lower rails extending along an outer surface of the bottom, the lower rails include apertures extending therethrough for receiving a lifting mechanism to engage and disengage the container from the chassis.

20. A stackable refuse collection container and refuse collection vehicle as claimed in claim 15 further including an

upper rail extending along an upper edge of each of the sides, the upper rails include apertures extending therethrough for receiving a lifting mechanism to engage and disengage the container from the chassis.

21. A stackable refuse collection container and refuse collection vehicle as claimed in claim 15 further including a discharge door formed in the body.

22. A stackable refuse collection container and refuse collection vehicle as claimed in claim 15 wherein the engagement mechanisms includes securing elements at opposing sides of the top.

23. A stackable refuse collection container and refuse collection vehicle as claimed in claim 22 wherein one of the securing elements is a hinge.

24. A method of collecting refuse comprising the steps of:

providing a refuse collection vehicle including a chassis carrying a compaction mechanism;

providing a plurality of empty stackable refuse collection container, the plurality of containers each including a body having a bottom and an open top constructed to be nestingly stacked with at least one of the remaining plurality of containers through the open top, a cover formed to engage the body and close the top, an engagement mechanism coupled to the body and the cover, the engagement mechanisms moveable between an engaged position securing the cover onto the body to allow compaction of refuse therein by the compaction mechanism, and a disengaged position permitting removal of the cover from the open top, and a loading door formed in an end of the body;

mounting an empty first one of the plurality of containers, with an engaged cover, on the chassis of the refuse collection vehicle with loading door positioned adjacent the compaction mechanism for receiving refuse from the compaction mechanism;

using the compacting mechanism, introducing and compacting refuse in the first one of the plurality of containers;

removing the first one of the plurality of containers with compacted refuse therein; and

mounting an empty second one of the plurality of containers on the chassis of the refuse collection vehicle with loading door positioned adjacent the compaction mechanism for receiving refuse from the compaction mechanism.

25. A method as claimed in claim 24 further including a step of loading the first one of the plurality of containers onto a transport vehicle and transporting the first one of the plurality of containers to a site.

26. A method as claimed in claim 25 further including a step of providing a second one of the plurality of containers containing refuse and loading the second one of the plurality of containers onto the transport vehicle and transporting the second one of the plurality of containers with the first one of the plurality of containers to a site.

27. A method as claimed in claim 25 further including as step of discharging compacted refuse from the first one of the plurality of containers and removing the cover from the open top.

28. A method as claimed in claim 27 further including a step of discharging compacted refuse from the second one of the plurality of containers and nestingly stacking the second one of the plurality of containers in the first one of the plurality of containers.

29. A method as claimed in claim 28 further includes the step of placing a stacked plurality of containers on a transport vehicle and transporting the stack to a site.